IV. PROPRIETORS' INCOME

Proprietors' income with inventory valuation and capital consumption adjustments is the current-production income of sole proprietorships, partnerships, and of tax-exempt cooperatives. A sole proprietorship is an unincorporated business required to file Schedule C of IRS Form 1040 (*Profit or Loss from Business*) or Schedule F (*Profit or Loss from Farming*). A partnership is an unincorporated business association required to file Form 1065 (*U.S. Return of Partnership Income*). A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its customer-members. Proprietors' income includes corporate directors' fees, but it excludes the imputed net rental income of owner-occupied housing as well as the dividends and the monetary interest that are received by nonfinancial sole proprietorships and partnerships and the rental income received by persons not primarily engaged in the real estate business.¹

Proprietors' income accounted for almost 10 percent of total personal income at the national level in 2005 (table D). The estimates of proprietors' income are generally presented in two parts—nonfarm proprietors' income, which accounted for about 97 percent of proprietors' income, and farm proprietors' income, which accounted for the remaining 3 percent.

Nonfarm proprietors' income

The estimation of nonfarm proprietors' income will be discussed in two parts: (1) the income received by nonfarm sole proprietorships and partnerships, and (2) the income received by tax-exempt cooperatives.

Income of nonfarm sole proprietorships and partnerships

The national estimates of the income of nonfarm sole proprietorships and partnerships are based on tabulations of Internal Revenue Service (IRS) tax returns: (1) "net profit or (loss)" reported on Schedule C of Form 1040, for sole proprietorships; (2) "ordinary business income (loss)" from Form 1065, for partnerships; and (3) "net rental real estate income (loss)" from Schedule K-1 of Form 1065. Because these data do not always reflect the income earned from current production and because they are incomplete, the estimates also include four major adjustments—the inventory valuation adjustment (IVA), the capital consumption adjustment (CCAdj), the misreporting adjustment, and the adjustment for the net margins on owner-built housing. The IVA removes the effects of the gains and losses that result from changes in the prices of products withdrawn from inventories. The CCAdj represents the difference between capital consumption allowances (depreciation on the historical-cost basis used in the

¹ The dividends are included in personal dividend income, the monetary interest, in personal interest income, and the rental income, in rental income of persons.

² The net profit or (loss) reported on Schedule C of form 1040 includes corporate directors' fees. Descriptions are based on forms for 2005.

³ Estimates of the IVA and CCAdj are in NIPA table 1.13, an estimate of the misreporting adjustment is in table 7.14, and an estimate of the margin on owner-built housing is in table 7.12 (line 225) in the *Survey of Current Business* 86 (August 2006).

source data) and the consumption of fixed capital (depreciation valued on a replacement-cost basis and the effects of the accidental destruction of depreciable plant and equipment).⁴ In addition, specific adjustments are made for the accidental destruction caused by major natural disasters.

The misreporting adjustment is an estimate of the net income of sole proprietors and partnerships that is not reported on tax returns. This adjustment accounted for about 42 percent of nonfarm proprietors' income in 2005.⁵

The adjustment for the net margins on owner-built housing is an addition to the estimate for the construction industry. It represents the imputed value of the net income of individuals from the construction or renovation of their own dwellings.

Like the national estimates, the state estimates are based on data tabulated from Schedule C of Form 1040 and from Form 1065. The geographic coding of the data is by tax-filing address. This address is assumed to be the same as the address of the place of residence.⁶

The national estimates reflect decreases in income that result from damage to fixed capital caused by natural disasters, such as hurricanes and floods; damage to inventories is also reflected in the adjustments. The national and state adjustments are prepared primarily on the basis of reports of insured losses by state from private sources and grants for disaster housing assistance by state from the Federal Emergency Management Agency.⁷

The source data necessary to prepare the other adjustments—the IVA, the CCAdj, the misreporting adjustment, and the net margins on owner-built housing—are available only at the national level. Therefore, the national estimates of nonfarm proprietors' income that include the IVA and CCAdj are allocated to states in proportion to tax return data that do not reflect the IVA and CCAdj. The national estimates of nonfarm proprietorship and partnership income of excluding the misreporting adjustment for 1992-2001 for most of the SIC two-digit industries were allocated to states in proportion to the sums for each industry of "net profit or (loss)" reported on Schedule C and "ordinary business income (loss)" from Form 1065. For coal mining, the national estimate excluding the misreporting adjustment was allocated to states in proportion to the number of Schedules C plus the number of partners in partnerships other than limited

⁴ The capital consumption adjustment also includes the differences between the service lives and the depreciation patterns used for tax accounting and the empirically based depreciation schedules that are used for national economic accounting. See Arnold J. Katz and Shelby W. Herman, "Improved Estimates of Fixed Reproducible Tangible Wealth, 1929-95," *Survey* 77 (May 1997): 69-92. See also "Capital consumption adjustment" and "Inventory valuation adjustment" in Chapter XIII Glossary.

⁵ For more information about the misreporting adjustment see Robert P. Parker, "Improved adjustments for misreporting of tax return information used to estimate the national income and product accounts, 1977," *Survey* 64 (June 1984):17-25; "The Comprehensive Revision of the U.S. National Income and Product Accounts: A Review of Revisions and Major Statistical Changes," *Survey* 71 (December 1991):39-40; and "Improved Estimates of the National Income and Product Accounts for 1959-95: Results of the Comprehensive Revision" *Survey* 76 (January/February 1996):1-31.

⁶ For additional information, see the section "Geographic characteristics of the source data" in Chapter I Introduction.

⁷ See "Disaster Adjustments" in Chapter XI Technical Notes.

⁸ For chemicals and allied products, the state data were adjusted to exclude the income of partnerships with gross receipts of \$20 million or more and fewer than four partners; the partners in these partnerships are assumed to be corporations.

partnerships.⁹ For the other industries, the national estimates excluding the misreporting adjustment were allocated to states in proportion to net receipts ("gross receipts or sales" less "returns and allowances" as reported on Form 1040 Schedule C and Form 1065) for each industry.¹⁰

The national estimates of the misreporting adjustment for 1992-2001 for all SIC industries except coal mining were allocated to states in proportion to net receipts for each industry. The data for net profit (or loss) are inappropriate for the allocation of the state estimates of this adjustment because net profit (or loss) is reduced by the misreporting that this adjustment largely reflects. For coal mining, the national estimate of the misreporting adjustment was allocated to states in proportion to the same series that was used to allocate the estimate excluding the misreporting adjustment.

The national estimates of nonfarm proprietorship and partnership income, excluding the misreporting adjustment, for 2001-2003 for North American Industry Classification System (NAICS) subsector industries were allocated to states in proportion to tabulations by industry of the IRS profit and income data described above. The national estimates of the misreporting adjustments for 2001-2003 were allocated to states in proportion to net receipts for each industry.

The 2004 state estimates of nonfarm proprietorship and partnership income, excluding the misreporting adjustment, for NAICS industries were extrapolated from the 2003 state estimates in three steps. First, national controls by industry for 2004 were allocated to states in proportion to each state's estimate for 2003. Next, the 2003 state estimates were summed to all-industry totals. These totals were extrapolated to 2004 by the relative change in the preliminary annual state estimates of nonfarm personal income. The extrapolated estimates were then adjusted proportionately to sum to the national all-industry control for the year. Each state's estimates of nonfarm proprietors' income from the first step were then adjusted proportionately to sum to these all industry totals. Third, the resulting industry estimates were then adjusted proportionately to sum to the national industry controls. Estimates for 2005 were extrapolated from 2004 by an identical process.

The 2004 and 2005 national estimates of the misreporting adjustment by industry were allocated to states using a weighted average of IRS net receipts data for 2002 and 2003 where the 2002 data was given a double weight. The estimates of nonfarm proprietorship and partnership income excluding the misreporting adjustment were then combined with estimates of the misreporting adjustment to yield nonfarm proprietors' income, excluding the income of nonfarm tax-exempt cooperatives.

⁹ For coal mining, a large proportion of net profit or (loss) is reported by limited partnerships from states that appear to be neither the states where the mining operations take place nor the states where most of the partners live.

¹⁰ The net profit or (loss) for these industries is not used because the data for these industries are highly volatile, an indication that they may be unreliable. In addition, these data frequently fluctuate into the negative range, so that they are difficult to use in an allocation procedure.

¹¹ The allocator for year t is an average of the IRS profit and income data for years t, t-1, and t-2.

¹² The allocator is an average of net receipts data for the current and two previous years.

¹³ The preliminary estimate is an average of the quarterly personal income estimates released each June.

Income of nonfarm tax-exempt cooperatives

The income of tax-exempt cooperatives consists of the net income, including the IVA and the CCAdj, received by agricultural cooperatives, rural electric cooperatives, and rural telephone cooperatives.

Agricultural cooperatives are mainly farm-marketing cooperatives and farm-supply cooperatives; they are classified in NAICS (and SIC) in wholesale trade. Until 2001, the national and state estimates of the net income of these cooperatives are based on data provided by the Rural Business and Cooperative Service of the U.S. Department of Agriculture. Since 2001 the national control is distributed to states by estimates of proprietorship and partnership income, excluding the misreporting adjustment in the nondurable wholesale trade industry.

Until 1999, the national and state estimates of the net income of rural electric cooperatives and rural telephone cooperatives are based on annual data for the net margin, or profit, of the cooperatives that have outstanding loans from the Rural Utilities Service (RUS) (formerly the Rural Electrification Administration) of the U.S. Department of Agriculture. For the state estimates, the net margin of each cooperative is allocated to the states in proportion to the distribution of the cooperative's customermembers reported by the RUS. The allocated amounts for each type of cooperative are summed to state totals, and these totals are then used to allocate the national estimates to states. Data for 1999 were used to distribute the national controls for 2000 and 2001. Since 2001 national controls are distributed to states by estimates of proprietorship and partnership income, excluding the misreporting adjustment in broadcasting and telecommunications (for rural telephone cooperatives) and utilities (for rural electric cooperatives).

Farm Proprietors' Income

Farm proprietors' income is the income received by the sole proprietorships and partnerships that operate farms. The national and state estimates of this income are based largely on the national and state estimates of the net income of all farms prepared by the Economic Research Service (ERS) of the U.S. Department of Agriculture (USDA). For a variety of reasons discussed below, the BEA estimates of the income of all farms differ somewhat from those used by USDA. In addition, BEA estimates corporate farm

¹⁴ The state estimates of farm proprietors' income are not controlled to the NIPA estimates. The NIPA methodology, using national aggregates of the components of farm proprietors' income and constrained to be consistent with other farm sector estimates appearing in the national accounts, yields different estimates than the independently applied state methodology, using state-level data. It is felt that the gap between the NIPA estimate and the sum of the state estimates is tolerable because of the much greater importance of farm proprietors' income to some states and because the gap is a very small percentage of total personal income, when summed over all states.

¹⁵ For information about the source data and the methods used to derive the USDA estimates, see Economic Research Service, *Major Statistical Series of the U.S. Department of Agriculture, Volume 3: Farm Income* (Washington, DC: National Technical Information Service (NTIS), November 1988).

income. This is subtracted from the income of all farms in order to derive farm proprietors' income. ¹⁶

The net income of all farms is defined as gross output less production expenses. For most of the components of gross output and for many components of production expenses, estimates are prepared at the state level and summed to yield national estimates.

Gross farm output

Gross farm output consists of cash receipts from the sale of agricultural products, Federal Government payments to farm operators, imputed and miscellaneous income received, and the value of the change in farm inventories.

<u>Cash receipts from sale of agricultural products.</u>—Cash receipts from sales accounted for about 86 percent of gross farm output at the national level in 2005. Cash receipts consist of the gross revenue received by farmers from the sale of crops, livestock, and livestock products and of the value of defaulted loans made by the Commodity Credit Corporation (CCC) and secured by crops. The estimates of cash receipts are based on USDA estimates of cash receipts adjusted to reflect differences in the treatment of CCC loans and intrastate interfarm sales.

The USDA estimates of cash receipts from crop sales include the net value of CCC loans (loans less redemptions); the loans are treated as crop sales, and any subsequent defaults on the loans do not affect the USDA estimates of the net income of all farms. BEA classifies the CCC loans as financial transactions: Crops held under CCC loan remain in measured farm inventories unless the loan is defaulted. The default of a loan is considered to be a sale of the crops and a reduction in farm inventories. To reflect this difference, BEA adjusts the USDA estimates of cash receipts from sales and the value of inventory change for each type of crop. The national estimates of the adjustments for each crop are allocated to states in proportion to data on net CCC loan activity for the crop from the Farm Service Agency.

Intrastate interfarm sales of livestock are not included in the USDA estimates of cash receipts for livestock sales or in the USDA estimates of the expenses of livestock purchases but those sales are included in the BEA estimates. However, the receipts for these sales offset the expenses for these purchases in the state estimates of farm income. To reflect this difference, BEA adjusts the USDA state estimates of cash receipts from the sale of livestock and the expenses of livestock purchased. The value of intrastate interfarm sales of livestock is estimated by subtracting USDA state-level data on livestock purchased from Census of Agriculture data on livestock purchased (the Census of Agriculture data include intrastate interfarm sales).

<u>Federal Government payments to farm operators.</u>—Federal Government payments to farm operators consist of deficiency payments under price support programs

¹⁶ For the differences between the USDA and the BEA estimates of net farm income at the national level, see NIPA table 7.15 "Relation of Net Farm Income in the National Income and Product Accounts to Net Farm Income as Published by the U.S. Department of Agriculture," *Survey* 85 (August 2005): 170.

¹⁷ The adjustments to the USDA estimates of the value of inventory change largely offset the adjustments to the estimates of cash receipts. The adjustments also reflect the differences in valuation that result from the differences in the timing of the sales and of the changes in inventories. For more information, see Robert P. Parker, "A Preview of the Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes," *Survey* 71 (September 1991): 30.

for specific commodities, disaster payments, conservation payments, and direct payments to farmers under federal appropriations legislation. The estimates of government payments are based on USDA national and state estimates of direct government payments.

<u>Imputed and miscellaneous income received.</u>—Imputed and miscellaneous income received consists of the imputed income from home consumption and the gross income from farm-related activities other than crop and livestock production.

Home consumption is an imputed estimate of the market value of food that is produced and consumed on farms. The estimates of home consumption are based on USDA national and state estimates of home consumption.

Gross income from farm-related activities includes the use of farms for recreational activities—such as hunting or fishing—the sale of forest products, and custom work performed for other farm operators—such as clearing land and harvesting crops. The estimates are based on USDA estimates of revenue from services and forestry adjusted to remove the imputed gross rental value of farm housing and patronage dividends received by farm operators as measured by USDA. BEA classifies the production of services of farm housing owned by farm operators in the real estate industry rather than in the farm industry and records the net rents in the rental income of persons. Patronage dividends received by farm operators are from agricultural cooperatives, which are mainly farm-marketing and farm-supply cooperatives. BEA classifies the income of these cooperatives as nonfarm proprietors' income.¹⁸

<u>Value of the change in farm inventories.</u>—This is an estimate of the value, at market prices, of the change in the quantity of inventories of harvested crops, livestock, materials, and supplies owned by farmers. For crops, for example, the estimate of the value of the change in the inventories of each type of crop is calculated as the difference between the value of the crops that are produced and the value of the crops that are sold or used as feed. This calculation accounts for all the inventories, regardless of the location of their storage, that are owned by farmers. The estimates of the value of the change plus the estimates of cash receipts from the sales of crops during the year yields a measure of the gross output of crops during the year.

The estimates of value of the change in crop and livestock inventories are based on USDA estimates of the value of change in crop and livestock inventories. The USDA estimates for crops are adjusted to include the changes in the inventories of crops that are held as collateral for CCC loans, as discussed above.

BEA defines farm inventories to include materials and supplies—such as feed, seed, and fertilizer—starting in 1991. The USDA estimates of the net income of all farms exclude such inventories. The national estimate of the value of the change in these inventories is allocated to states in proportion to the USDA data on the year-to-year change in purchased inputs. Since the latter data were discontinued in 2003, the data for 2003 are used for 2004-05.

¹⁸ The income of agricultural cooperatives that BEA measures as part of nonfarm proprietors' income is the profits of the cooperatives. The income from the agricultural cooperatives that BEA excludes from the USDA measure of farm income is the patronage dividends that are paid to farm operators out of the current and accumulated profits of the cooperatives.

Production expenses

Farm production expenses consist of purchases of feed, livestock and poultry, seed, fertilizer, agricultural chemicals and lime, and petroleum products; labor expenses; machinery rental and custom work; animal health costs; and all other expenses including depreciation. BEA adjusts the USDA estimates of production expenses to account for methodological differences in the treatment of depreciation and to conform to BEA definitions and classifications.

<u>Depreciation.</u>—Both the USDA and the BEA estimates of depreciation expenses are on current replacement-cost basis. However, the BEA estimates reflect a geometric depreciation schedule, whereas USDA estimates reflect a declining-balance schedule. The amount of the difference between the BEA and the USDA national estimates of depreciation is allocated to states in proportion to the USDA estimates. These amounts are added to the USDA state estimates of depreciation to yield the BEA estimates.

<u>Wages and salaries.</u>—The USDA classifies the wages and salaries received by the owner-operators of sole proprietorship farms, partnership farms, and family-held corporate farms as part of the return to capital and therefore does not include them in its estimates of production expenses. BEA classifies these wages and salaries as an expense item and adds them to the USDA estimates of other production expenses. The BEA national and state estimates of these wages and salaries are based on data provided by the USDA.

<u>Fines.</u>—The USDA estimate of production expenses also excludes an estimate of the payment of fines by farm operators to the Federal Government. BEA classifies these fines as a production expense and adds these fines to the USDA estimates of production expenses. The national estimate of these fines is allocated to states in proportion to the USDA estimates of cash receipts from the sale of crops and livestock.

<u>Farm housing.</u>—The USDA estimates of farm production expenses include expenses—such as property taxes and mortgage insurance—associated with the production of services of farm housing owned by farm operators. Since BEA classifies the production of farm housing in the real estate industry rather than in the farm industry, the expenses associated with the operation farm housing are removed from the USDA estimates. The national estimates of farm housing expenses are allocated to the states in proportion to data on operator dwelling expenses provided by USDA.

<u>Livestock purchased.</u>—The USDA production expense estimates are further adjusted to include intrastate interfarm purchases of livestock as discussed above.

Corporate farm income

The USDA estimates of the total net income of all farms, reflecting the coverage of the underlying source data, include the income of corporate farms. BEA makes an adjustment to exclude the income of these farms.

National control totals of corporate farm income for 1992-2005 were prepared in five steps. First, the proportions of each of four components of gross output and the proportion of total production expenses that were accounted for by corporate farms for

¹⁹ Labor expenses consist of the payments to farm labor contractors and the cash wages, pay-in-kind, and supplements to the wages of hired labor. All other expenses consist mainly of the estimates of overhead, such as depreciation, mortgage interest, taxes, and the costs of electricity and telephone service.

1992 and for 1997 were calculated from data from the censuses of agriculture.²⁰ Second, corporate proportions for the corresponding gross output components and for production expenses were calculated for 1992-2005 from data from the Agricultural Resource Management Survey, with the data from 2004 held constant for 2005. Third, the 1992 and 1997 census-based proportions were interpolated to 1993-96 and extrapolated to 2005 by the relative change in a moving average of the corresponding survey-based proportions.

Fourth, the extrapolated proportions for each year were multiplied by the BEA national estimate of each component of the gross output for all farms and by the BEA national estimate of the production expenses for all farms in order to obtain the national estimates of the components and of production expenses for corporations.²¹ Fifth, the estimate of corporate production expenses for the year was subtracted from the sum of the estimates of the components of corporate gross output in order to obtain the national control totals for the income of corporate farms.

The national control totals for the net income of corporate farms for 1992-2005 were disaggregated to the state level in three steps. First, the corporate proportions of total cash receipts from the sale of crops and livestock for 1992 and for 1997 for each state were calculated from data from the censuses of agriculture and proportions for 1993-96 were derived with straight-line interpolation. Second, the proportions for each year were multiplied by the BEA state estimates for the year in order to obtain state approximations of the net income of corporate farms for those years; the 1997 proportions were used to obtain the approximations for 1998-2005. Third, the national control total for the net income of corporate farms for each year was allocated to states in proportion to the state approximations.

²⁰ The four components of gross output are cash receipts from the sale of agricultural products, cash receipts from other farm-related activities, Federal government payments, and the value of the change in inventories.

²¹ In deriving the national estimates of corporate income, the value of the change in inventories of materials and supplies is added to the BEA national estimate of the production expenses and not included with crop and livestock inventory change in gross output.